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09/923,518

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EXAMINER

KNOLL, CLIFFORD H

ART UNIT

PAPER NUMBER

2111

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/923,518	Applicant(s) PENG, SHENG-CHANG	
	Examiner Clifford H. Knoll	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. *Claims 1, 3-4, 9, 13, 14, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

In claim 1, the "respectively connected" (line 8) is unclear as to what of the apparatuses the terminal connections are respective. The grammar of "to arbiter" (line 9) renders it unclear. The "said output terminal" (line 19) is unclear because the reference to previously claimed output terminals cannot be clearly established. The "plurality of request signal terminals" and the "plurality of grant signal terminals" (line 22) are unclear because their relationship to previously established pluralities cannot be determined. The "respectively connected" (line 22) is unclear as to what of the master bus arbiter it is respective.

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In claim 3, the "said PCI response" is unclear as to which previously established PCI response it refers.

In claim 4, the "another [output terminal]" (line 2) is unclear as to its relationship to already established "one of said output terminals" of claim 1, lines 17-18).

In claim 9, the "said high speed bus" (line 13) is unclear as to its relationship to previously established high speed bus interface. The "respectively connected" (line 20) is unclear as to what of the master bus arbiter it is respective.

In claim 13, the "providing" (line 2) is unclear as to what structure is implied that provides. The "said interface"(line 5) is unclear as to its relationship to previously established interfaces.

In claim 14, the "said PCI bus" (line 8) is lacks a clear basis to previously established limitations.

In claim 17, the recitation is unclear as to its relationship to the same limitations established in claim 4.

Claim Objections

2. *Claim 17 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to*

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place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 17 recites identical limitations of claim 4.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. *Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Abramson (US 6134625 A).*

Regarding claim 1, Abramson discloses a memory control to control memory access (e.g., col. 2, lines 32-33), a PCI response for data response (e.g., col. 2, lines 46-50), a master bus arbiter having request and grant signals to arbitrate PCI bus access (e.g., col. 2, lines 43-46), south bridge with high speed interface (e.g., Fig. 2, "235"), direct memory access engine (e.g., col. 4, lines 27-28) with an output connected to up/down controller to control data transmission direction (e.g., col. 4, lines 29-30), a PCI master controller connected to an output of the up/down controller to output a data access

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transaction when the output terminal is outputting a request signal (e.g., Fig. 2, "205").

Regarding claim 2, Abramson also discloses a PCI response to respond to requests (e.g., col. 6, lines 27-29).

Regarding claim 3, Abramson also discloses a PCI response is disabled (e.g., col. 6, lines 29-30).

Regarding claim 4, Abramson also discloses the up/down controller the connection to the master controller (e.g., col. 4, lines 29-30) and to the high speed interface (e.g., col. 4, lines 52-55).

Regarding claim 5, Abramson also discloses the output connected to the high speed bus is disabled (e.g., col. 4, lines 49-50).

Regarding claim 6, Abramson also discloses the request and grant signals of the master bus arbiter are simultaneously connected to the request and grant signals of the sub-bus arbiter (e.g., Fig. 7, "735"; Fig. 5, "515").

Regarding claim 7, Abramson also discloses the master arbiter ensures fluent data access of the apparatuses and bridges (e.g., col. 6, lines 32-44).

Regarding claim 8, Abramson also discloses the sub arbiter connected to the master controller to request redirection (e.g., col. 4, lines 35-39).

Regarding claim 9, Abramson discloses a memory control to control memory access (e.g., col. 2, lines 32-33), to determine whether data transmission on a PCI bus is granted (e.g., col. 2, lines 47-49), and a high-speed bus for data transmission (e.g., Fig. 1, "AGP"), a PCI response for data response (e.g., col. 2, lines 46-50), a master bus arbiter having request and grant signals

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to arbitrate PCI bus access (e.g., col. 2, lines 43-46), south bridge with high speed interface (e.g., Fig. 2, "205"), direct memory access engine (e.g., col. 4, lines 27-28) with an output connected to up/down controller to control data transmission direction (e.g., col. 4, lines 29-30) with an output to a high speed bus (e.g., Fig. 3, "A_WxR"), a PCI master controller connected to an output of the up/down controller to output a data access transaction when the output terminal is outputting a request signal (e.g., Fig. 2, "205").

Regarding claim 10, the up/down controller builds up a data access to the north bridge according to the request (e.g., col. 28-30).

Regarding claim 11, the up/down controller builds up a data access to the north bridge according to the request (e.g., col. 28-30).

Regarding claim 12, Abramson also discloses a PCI response to respond to requests (e.g., col. 6, lines 27-29).

Regarding claim 13, Abramson discloses the north bridge with PCI bus interface (e.g., Fig. 1) and a south bridge with a PCI and high speed bus interface (e.g., Fig. 1, "130", "155") to selectively provide compliance with the provided interface (e.g., col. 3, lines 59-63).

Regarding claim 14, Abramson also discloses direct memory access engine (e.g., col. 4, lines 27-28) with an output connected to up/down controller to control data transmission direction (e.g., col. 4, lines 29-30), a PCI master controller connected to an output of the up/down controller to output a data access transaction when the output terminal is outputting a request signal (e.g., Fig. 2, "205").

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Regarding claim 15, Abramson also discloses a PCI response to respond to requests (e.g., col. 6, lines 27-29).

Regarding claim 16, Abramson also discloses a PCI response is disabled (e.g., col. 6, lines 29-30).

Regarding claim 17, Abramson also discloses the up/down controller the connection to the master controller (e.g., col. 4, lines 29-30) and to the high speed interface (e.g., col. 4, lines 52-55).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H. Knoll whose telephone number is 571-272-3636. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Clifford H Knoll/
Clifford H Knoll
Primary Examiner
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